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|--|---------------|----------------------|---------------------|------------------|
| APPLICATION NO.  | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/781,672   | 02/20/2004    | Tsuyoshi Itaya       | 1248-0701P          | 5550             |
| 2252   | 7590          | 06/06/2008           | EXAMINER            |                  |
| BIRCH STEWART KOLASCH & BIRCH<br>PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |               |                      | LEE, MICHAEL        |                  |
| ART UNIT   | PAPER NUMBER  |                      |                     |                  |
|  | 2622          |                      |                     |                  |
| NOTIFICATION DATE  | DELIVERY MODE |                      |                     |                  |
| 06/06/2008   | ELECTRONIC    |                      |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

|                              |                                      |  |
|------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/781,672 | <b>Applicant(s)</b><br>ITAYA, TSUYOSHI |
|                              | <b>Examiner</b><br>M. Lee            | <b>Art Unit</b><br>2622                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 January 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 3,5 and 7-15 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 3,5,7-15 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-166/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mishima et al. (5,600,680).

Regarding claim 7, Mishima discloses a television receiving apparatus showing a reference signal frequency shifting step (4-5, 6-19), a local oscillating frequency shifting step (6). The phase comparator 13 is intended to detect any frequency interference or signal disturbance.

Regarding claim 8, in addition of above, Mishima shows a shifting circuit (16-18), and a control circuit (13, 14).

Regarding claim 9, in addition of above, Mishima shows an oscillating circuit (6), a shifting circuit (16-18), and a control circuit (13,14).

Regarding claim 10, in addition of above, see col. 5, lines 60-64.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima et al. (5,600,680).

Regarding claim 12, Mishima does not specify the 45.75 MHz IF frequency as claimed. In any event, since the local oscillators can be can be changed to any value, it would have been obvious to one of ordinary skill in the art to modify Mishima so that the receiver could be operated in different IF frequency. Clearly, the selection of the IF frequency would have been an obvious design choice.

Regarding claims 13, 3 and 5, in addition of above, Mishima shows a capacitive element 17, which is an equivalent of the electrostatic capacitor as claimed. It is well known in the art that the two elements are interchangeable without affecting the performance of a device. Thus, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to replace the capacitive element 17 with an electrostatic capacitor, such as a variable capacitor which can be made of a plurality of continuous variable parallel plates or a plurality of selectable discrete capacitors.

Regarding claims 11 and 14, the capacitor 60 or 62 meets the memory circuit as claimed.

Regarding claim 15, see rejection to claim 12.

***Response to Arguments***

5. Applicant's arguments filed 4/23/07 have been fully considered but they are not persuasive.

First of all, it should be noted that the current office rejection is based on Mishima, a U.S. Patent reference which was used to reject the claim in an Office action

dated 1/23/07. The need of revisit Mishima is due to new interpretations of the claims and the reference as set forth above. The Office apologizes for this delay.

In considering applicant's argument that the object of Mishima is to improve the detection linearity in the picture detection...Mishima and the present invention are completely different from each other in terms of not only the object but also of the arrangement and the effect...the present invention cannot be anticipated by Mishima, the examiner disagrees. It is true that Mishima's object is to improve picture linear detection; however, the phase comparator 13 in Mishima is capable to detect picture interference signals. In col. 2, lines 10-12, Mishima hints that the phase stability of a video carrier can be compromised by decreasing in amplitude of the video carrier itself. The decreasing in amplitude of the video carrier can be caused by many factors. One of them, other than the one described in Mishima, is the inter-channel frequency interference. Inter-channel frequency interference destructs the amplitude of the video carrier because the interference signals are usually not in phase with the true carrier. If any inter-channel or image-signal interference exists in Mishima, it would cause the video carrier to decrease in amplitude and thus unstabilize its phase. However, by using the phase comparator 13 and the feedback loop to the capacitive element 17, Mishima effectively stabilizes the phase of the video carrier. Clearly, the phase instability of the video carrier is not only caused by the signal itself, but it also can be caused by inter-channel interferences. Thus, Mishima is intended to stabilize the phase of the carrier no matter how the instability caused. It meets the signal interference objective as claimed.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number 571-272-7349. The examiner can normally be reached on Monday through Thursday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz, can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/M. Lee/  
Primary Examiner  
Art Unit 2622